Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start		Rating **	Α	Issue No.		2	
LM End		Issue Type +	Ма	Location *		N/A	
Earthen Levee			GPS La	atitude	/Longitude		
Category				Start		End	
Item	Operations & Maintenance				0		0
пеш	Manuals			0			
DWR ID	DWR_ST0	009_01_s _ 201	3_2				
		Comn	nent Cod	le			
		Inspecto	or Comm	nent			
Sutter Yard has the O&M manuals.							

No Photos

LM Start		Rating **	Α	Issue No.		4	
LM End		Issue Type +	Ма	Location * N/A			
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Emergency Supplies &				0		0
пеш	Equipmer	nt			0		0
DWR ID	DWR_ST0	009_01_s _ 201	3_4				
		Comn	nent Cod	le			
	Inspector Comment						
Sutter Yard	d has a sto	ockpile of eme	rgency s	supplies and	d eq	uipment.	

No Photos

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start		Rating **	Α	Issue No.		5		
LM End		Issue Type +	Ма	Location *		N/A		
Category	Earthen L	evee		GPS La	Latitude/Longitude			
Category				Start		End		
Item	Flood Pre	paredness &	Training		٥		0	
пеш					٥		0	
DWR ID	DWR_ST0	009_01_s _ 201	3_5		·			
		Comn	nent Cod	le				
		Inspecto	or Comm	ent				
Sutter Yard	d had flood	d fight training	October	2016.				

No Photos

LM Start	1.08	1.08 Rating ** A Issue No. 10				
LM End	1.08	Issue Type +	Ма	Location *		LS
Category Earthen Levee			GPS La	atitud	e/Longitude	
Calegory			Start		End	
Item	Vegetatio	Vegetation			07°	39.028307°
item				-121.8019	60°	-121.801960 °
DWR ID	DWR_ST0	009_01_s _ 201	8_10			
Comment Code						
V1 : Contro	ol annual g	grass and wee	ds on th	e levee slo	pes a	and

easements.

Inspector Comment

Lma should continue to manage the native grasses on both slopes.

Photo 1 of 1: SP_2018_ST0009_286_10_20180403_00020.jpg



View of native grasses on both slopes.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.		25
LM End	2.14	Issue Type +	Ма	Location *		
Category	Suppleme	ental		GPS Lat	ituc	le/Longitude
Calegory				Start		End
Item	DWR UCI	P LMA Respo	onsibility	39.02813	2 °	39.028132 °
пеш				-121.78238	9°	-121.782389 °
DWR ID						

Comment Code

Inspector Comment

FS_ID:51484 DS_ID:16591 EP_NO: 10099

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 2: 4-foot by 7-foot reinforced concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)].

FS Date: 4/12/2017 9:20:05 AM

LM Start	2.14	Rating **	A/W	Issue No.	25 (cont)
LM End	2.14	Issue Type +	Ma	Location *	

Photo 1 of 3 : UCIP_SP_2018_51484_64226.jpg



Slide gates on WS shoulder.

Photo 2 of 3: UCIP_SP_2018_51484_64225.jpg



Wooden Flap gates on WS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	25 (cont)		
LM End	2.14	Issue Type +	Ма	Location *			
Category	Suppleme		GPS La	atitud	le/Longitude		
Calegory				Start		End	
Item	DWR UC	P LMA Respo	onsibility	39.0281	32 °	39.028132 °	
пеш				-121.7823	89°	-121.782389 °	
DWR ID	WR ID						
	Comment Code						

Inspector Comment

FS_ID:51484 DS_ID:16591 EP_NO: 10099

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.

FIELD_STRUCT_DESC: 1 of 2: 4-foot by 7-foot reinforced concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)].

FS Date: 4/12/2017 9:20:05 AM

Photo 3 of 3 : UCIP_SP_2018_51484_64224.jpg



Pump house on LS toe.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.		26	
LM End	2.14	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Category			Start		End		
Item	DWR UCI	P LMA Respo	nsibility	39.0281	24°	39.028124°	
пеш				-121.7823	44 °	-121.782344 °	
DWR ID							
Comment Code							

Inspector Comment

FS_ID:51485 DS_ID:16856 EP_NO: 10099

Repair Type: No Action Needed Crossing Status: Found

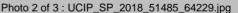
UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 4-foot by 7-foot concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM

LM Start	2.14	Rating **	A/W	Issue No.	26 (cont)
LM End	2.14	Issue Type +	Ma	Location *	



Slide gates on WS shoulder.





Wooden flap gates on WS toe.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start	2.14	Rating **	A/W	Issue No.	26 (cont)		
LM End	2.14	Issue Type +	Ма	Location *			
Supplemental				GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UCI	IP LMA Respo	onsibility	39.0281	24°	39.028124°	
пеш				-121.7823	44 °	-121.782344°	
DWR ID							
	Comment Code						

Inspector Comment

FS_ID:51485 DS_ID:16856 EP_NO: 10099

Repair Type: No Action Needed Crossing Status: Found

UCIP Comments: 4/10/2017 Crossing appears to be in good condition. (DWR Sutter Yard- AFreitag)10/11/2016 Crossing appears to be in good condition. (DWR Sutter Yard - afreitag)4/18/2016 Crossing appears to be in good condition. No noticeable issues to report.5/7/2015 Crossing is in good condition. No noticeable issues to report.11/13/2014 Same as last inspection.5/12/2014 Same as last inspection.10/30/2013 Same as last inspection.5/20/2013 Same as last inspection.

FIELD_STRUCT_DESC: 2 of 2: 4-foot by 7-foot concrete discharge tunnel through the levee, 38 feet below the crown. Slide gate in 4-foot by 15-foot concrete well on the waterside (WS) slope. Pump house located on the landside (LS) toe and wooden flap gates on the WS toe. (two 4-foot by 7-foot tunnel [HLM 2.13] authorized under Automatic Board Order (ABO) issued as Permit No. 10099, 1955 - Reclamation District No. 1660). [Additional Reference(s): DWR Levee Log, 1993. USACE Sacramento O&M Manual 133, August 1955 (Station 1044+60)]. FS Date: 4/12/2017 9:20:37 AM



Pump house on LS toe.

LM Start	2.16	Rating **	U	Issue No.		12
LM End	2.16	Issue Type +	Ma	Location *		LS
Category	Earthen L	evee	GPS Latitude/Longitude			
Category				Start		End
Item	Animal Co	ontrol		39.0281	37°	39.028137°
пеш				-121.7820	20°	-121.782020 °
DWR ID DWR_ST0009_01_f _ 2016_12						
Comment Code						

A3 : No rodents visible, but rodent burrows visible; need to backfill and

compact or grout burrows.

Inspector Comment



View of a rodent hole along the levee crown.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Tisdale Bypass	Left	4.51	03/27/2018 03/27/2018	Bob Duffey

LM Start	2.16	Rating **	U	Issue No.		12 (cont)	
LM End	2.16	Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Animal Co	ontrol		39.0281	37°	39.028137 °	
item				-121.782020 ° -121.7820			
DWR ID DWR_ST0009_01_f _ 2016_12							
Comment Code							
A3 : No roccompact o		le, but rodent rows.	burrows	visible; ne	ed to	backfill and	
		Inspecto	or Comm	nent			



Another view of the rodent holes along the crown and landside slope.

N: Not Inspected/Rated C: Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/27/2018 03/27/2018	Bob Duffey

LM Start	0.69	Rating **	М	Issue No.		9	
LM End	0.71	Issue Type +	Ma	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
Calegory				Start		End	
Item	Erosion /	Bank Caving		39.0256	02°	39.025657°	
item				-121.808527° -1		-121.808027 °	
DWR ID DWR_ST0009_02_s _ 2017_9							
		Comn	nent Cod	de			
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	ction.	
		Inspecto	or Comm	nent			
Repair the erosion along the landside toe.							



View of the erosion along the landside toe from the County Road.

LM Start	0.97	Rating **	М	Issue No.		10
LM End	0.98	Issue Type +	Ma	Location *	LS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Erosion / Bank Caving			39.0255	40°	39.025572°
пеш				-121.803272 °		-121.802990 °
DWR ID DWR_ST0009_02_s _ 2017_10						
		Comn	nent Cod	le		
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	tion.
		Inspecto	or Comm	nent		
Repair the erosion along the landside toe.						



View of the erosion along the landside toe from the County Road.

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.14	Rating **	М	Issue No.		13
LM End	1.14	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS La	atitud	le/Longitude	
			Start		End	
Item	Erosion / Bank Caving			39.0254	60°	39.025460°
пеш			-121.800022 °		2° -121.800022°	
DWR ID DWR_ST0009_02_f _ 2016_13						
		Comn	nent Cod	le		
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spe	ction.
		Inspecto	or Comm	nent		
Erosion around the WS concrete vault.						

	///	
	No.	
		* *
		2112/02/2016
SOLA SEX	大型旗	

Photo 1 of 2: SP_2018_ST0009_287_13_20180305_00007.jpg

View of the erosion along the concrete vault.

 LM Start
 1.14
 Rating **
 M
 Issue No.
 13 (cont)

 LM End
 1.14
 Issue Type +
 Ma
 Location *
 WS

Photo 2 of 2: SP_2018_ST0009_287_13_20180305_00008.jpg



Another view of the erosion along the concrete vault.

LM Start	1.19	Rating **	A/W	Issue No.		290
LM End	1.19	Issue Type +	Ма	Location *		WS
Category Earthen Levee				GPS La	atitud	e/Longitude
Calegory						End
Item	Erosion / Bank Caving			39.0254	90°	39.025490°
пеш				-121.7992	40°	-121.799240 °
DWR ID DWR_ST0009_02_s _ 2015_290						
		Comn	nent Cod	le		
E1 : Note and monitor erosion site.						
		Inspecto	or Comm	nent		
Sutter Yard needs to monitor the erosion along the berm.						



View of the erosion along the waterside berm.

* Location	** Rating		+ Issue Type
LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/27/2018 03/27/2018	Bob Duffey

LM Start	1.29	Rating **	A/W	Issue No.		4
LM End	1.29	Issue Type +	Ма	Location *		WS
Category Earthen Levee				GPS La	atitud	e/Longitude
				Start		End
Item	Erosion /	Erosion / Bank Caving			78°	39.025478°
пеш				-121.797232 °		-121.797232 °
DWR ID DWR_ST0009_02_s _ 2013_4						
		Comn	nent Cod	le		
E2 : Sched	dule repair	of erosion site	e prior to	the next in	spec	tion.
		Inspecto	or Comm	nent		
Sutter Yard needs to monitor the erosion.						

Photo 1 of 1 : SP_2018_ST0009_287_4_20180305_00003.jpg
sa ningaga.

View of the erosion along the waterside berm.

LM Start	1.35	Rating **	М	Issue No.		7	
LM End	1.35	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS La	atitud	e/Longitude		
			Start		End		
ltom	Vegetation			39.025445°		39.025445°	
nem			-121.796092 °		-121.796092°		
DWR ID	DWR_ST0	009_02_s _ 201	8_7				
		Comn	nent Cod	le			
V1 : Control annual grass and weeds on the levee slopes and easements.							
Inspector Comment							
Removed the native grasses on both slopes.							



View of native grasses on both slopes.

LM Start	1.48	Rating **	A/W	Issue No.		5
LIVI Start						
LM End	1.50	Issue Type +	Ma	Location *		WS
Category Earthen Levee			GPS La	atitud	e/Longitude	
Odlogory						End
Item	Erosion / Bank Caving			39.0254	60°	39.025446°
пеш				-121.793815 °		-121.793347 °
DWR ID DWR_ST0009_02_s _ 2013_5						
		Comn	nent Cod	le		
E2 : Schedule repair of erosion site prior to the next inspection.						
		Inspecto	or Comm	nent		
Sutter Yard needs to monitor the erosion.						



View of the erosion along the waterside berm.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

Maintenance Issue Types Only, Levee Inspection Report By Mile - Spring 2018

Sutter Maintenance Yard Tisdale Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Tisdale Bypass	Right	4.43	03/27/2018 03/27/2018	Bob Duffey

LM Start	3.93	Rating **	A/W	Issue No.		2		
LM End	3.93	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee			GPS Latitude/Longitude				
		Start		End				
Item	Erosion / Bank Caving			39.0250	60°	39.025060°		
		-121.7481	78 °	-121.748178°				
DWR ID	DWR_ST0009_02_f _ 2016_2							
Comment Code								
E1 : Note a	and monito	or erosion site						
Inspector Comment								



View of the erosion along the waterside berm.

LM Start	4.09	Rating **	A/W	Issue No.		18		
LM End	4.09	Issue Type +	Ma	Location *		WS		
Category	Earthen Levee			GPS Latitude/Longitude				
				Start		End		
Item	Erosion / Bank Caving			39.0249	12 °	39.024912 °		
				-121.7452	37°	-121.745237 °		
DWR ID	DWR_ST0009_02_f _ 2017_18							
Comment Code								

Comment Code

E2: Schedule repair of erosion site prior to the next inspection.

Inspector Comment

Repair the erosion along the water side berm.

Photo 1 of 1 : SP_2018_ST0009_287_18_20180305_00009.jpg



View of the erosion along the waterside berm.